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12/14

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,567	10/30/2003	Maurizio Pilu	1509-464	5917

22429 7590 09/17/2007
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EXAMINER

MADDEN, GREGORY VINCENT

ART UNIT	PAPER NUMBER
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2622

MAIL DATE	DELIVERY MODE
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09/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/696,567	Applicant(s) PILU ET AL.	
	Examiner Gregory V. Madden	Art Unit 2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-59 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed July 20, 2007 have been fully considered but they are not persuasive.

First, the Examiner notes that the Applicant has amended claim 7 to overcome the previous double patenting objection. Thus, the objection to claims 7 and 8 is hereby withdrawn.

In regard to claims, 1, 21, 40, and 44, the Applicant argues that the replay command control button 190 of Sisselman cannot generate a saliency signal while the image signal is being produced, as “[r]eplay obviously is performed sometime after an image signal is produced by a camera” (See Remarks, Pg. 11). The Examiner respectfully disagrees. While in most instances replay is performed after an image signal is produced by a camera, this is not the case in the Sisselman reference. Note Para. [0034], where Sisselman discloses that “...the microprocessor 350 continues to write the live video sequentially to the remaining memory segments in the loop” after the user has actuated the replay button 190 to instantaneously review a portion of the saved image data. Thus, even during replay, the image signal continues to be produced. The Examiner considers the actuation of the replay button 190 to be the generation of a “saliency signal”, as the user actuates the replay button 190 at a particular moment of interest (i.e. the moment at which the desire replay) during the capture of an image signal. For this reason, the Examiner believes that the Sisselman reference sufficiently teaches the limitations of claims 1, 21, 40, and 44, and thus the rejections to these claims are maintained. Further, the rejections to dependent claims 2-20, 22-39, 41-43, and 45-47 are also maintained.

Next, considering claim 51, the Applicant again argues that the replay command control button 190 of Sisselman cannot generate a saliency signal while the image signal is being produced, as replay is generally performed after an image signal is produced. Also, the Applicant contends that “[t]here is no indication in Sisselman that the number of times a replay button is pressed is correlated to a particular

Art Unit: 2622

image” (See Remarks, Pg. 12). Again, the Examiner respectfully disagrees. As set forth above, Para. [0034] of Sisselman discloses that “...the microprocessor 350 continues to write the live video sequentially to the remaining memory segments in the loop” after the user has actuated the replay button 190 to instantaneously review a portion of the saved image data. Thus, even during replay, the image signal continues to be produced. The Examiner considers the actuation of the replay button 190 to be the generation of a “saliency signal”, as the user actuates the replay button 190 at a particular moment of interest (i.e. the moment at which the desire replay) during the capture of an image signal. Further, Para. [0034] teaches that the capacity of the buffer (memory segments A, B, C) is determined in response to the number of times the replay button 190 is pressed, as the more often replay button 190 is pressed, the more of memory segments A, B, and C are allocated for replay, thereby leaving less memory available for the storage of live video. In this respect, the Examiner believes that Sisselman does teach that the capacity of the buffer for receiving the picture signals is determined in response to the saliency signal. Thus, the rejection of claim 51, along with dependent claims 52-53, is maintained.

As for claim 54, the Applicant again argues that the replay command control button 190 of Sisselman cannot generate a saliency signal while the image signal is being produced, as replay is generally performed after an image signal is produced. Also, the Applicant contends that “[t]here is no indication in Sisselman that a correlation exists between fast forwarding and a desire to see a particular image” (See Remarks, Pg. 12). Again, the Examiner respectfully disagrees. As shown above, the Examiner believes that the replay button 190 of Sisselman does read on the Applicant’s generation of a saliency signal. Further, the Examiner believes that the passing of picture signals not chosen when the user operates control button 190 teaches the selective passing of picture signals in response to the saliency signals, and thus the rejection of claim 54 is maintained. The rejection of dependent claims 55 and 56 are also maintained.

Next, considering claim 48, the Applicant contends that the combination of Sisselman in view of Fiore is improper, as “...there is no indication in the relied upon Fiore paragraphs [0040]-[0041], [0044], and [0047]-[0051] that the compression introduced by compressor 12 on the output signal of monitor 6 is responsive to the output signal of external event source 8” (See Remarks, Pg. 13). The Examiner respectfully disagrees. Noting Para. [0044], Fiore teaches that the compression algorithm used in the system is dependent upon the nature of the input signal data, wherein the input signal data depends on the output signal of the external event source 8, as taught in Paras. [0040-0041]. In this respect, the Examiner believes that Fiore does teach that the compression is responsive to the saliency signal (i.e. the event source 8). Further, while the Applicant argues that there would be no motivation to combine the Sisselman device with the network system of Fiore, the Examiner believes that the signal processor (10) of Fiore would have been obvious to one of ordinary skill in the art to incorporate into the monitoring device (6), as such incorporation of processing circuitry within image capturing devices is well known to those of ordinary skill in the art. In this respect, the Examiner believes that a combination of the Fiore device with the Sisselman device would have been obvious to one of ordinary skill in the art, and thus the rejection of claim 48 is hereby maintained.

Finally, considering claim 57, the Applicant argues that Sisselman in view of Fiore fails to teach the limitations of the claim, as the “flagging” of the Fiore reference “...is not the same as selectively retaining images associated with high saliency levels in preference to images with low saliency levels” (See Remarks, Pg. 14). Again, the Examiner respectfully disagrees. The Examiner is interpreting “saliency levels” to be the level of interest that the user has in retaining particular images, and thus “high saliency levels” are moments where the user is interested in retaining images, and thus saliency signals are generated, wherein “low saliency levels” are moments where the user is not interested in retaining images, and thus saliency signals are not generated. In this respect, the Examiner believes that the retaining of selective data frames from circular storage buffer 15 to be stored in memory 17 in response to

Art Unit: 2622

event signals from event source 8 is equivalent to “selectively retaining images associated with higher saliency levels in preference to images with low saliency levels”, as Fiore teaches in Figs. 2-3 and Paras. [0047-0048]. As such, the rejection of claim 57 is maintained, as is the rejection of dependent claims 58 and 59.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 4, 10-15, 17, 19-21, 23, 24, 28-33, 35, 37-47, and 51-56 are rejected under 35

U.S.C. 102(e) as being anticipated by Sisselman (U.S. Pub. 2003/0007079).

First, considering **claim 1**, the Sisselman reference teaches a camera apparatus comprising an electronic camera (hand-held personal viewing device 100) for producing an image signal (via image/signal processor 320), a user operable picture taking control (switch 140) for selectively activating the camera to take pictures, and an additional mechanically operable user control (e.g. control button 190) for receiving an input from a user and for generating a saliency signal (i.e. a replay command) while the image signal is being produced, operation of at least a part of the camera apparatus being arranged to be controlled in response to the saliency signal. Note that RAM 370 is controlled to alter the storage sequence of image data in response to the saliency signal (i.e. a replay command) generated by the user. Please refer to Figs. 1, 5, and 8, Paras. [0026-0034].

As for **claim 3**, the limitations of claim 1 are set forth above, and Sisselman further discloses that the part includes a buffer (circular buffer configuration of RAM 370) for receiving the image signal, the buffer having a capacity arranged to be controlled by the saliency signal during operation of the camera apparatus. Note that the user controls the length of the buffer based upon the number of times the replay button is pressed, as is taught in Col. [0034].

Regarding **claim 4**, again the limitations of claim 1 are set forth above, and the Sisselman reference also teaches that the part includes image selection circuitry (microprocessor 350) for receiving the saliency signals (i.e. from control button 190) and image signals (from image/signal processor 320) and for selectively passing ones of the image signals as determined by the saliency signal. Please refer to Paras. [0033-0034].

Next, considering **claim 10**, the limitations of claim 1 are taught above, and Sisselman teaches that the apparatus further includes a user operable picture taking control (switch 140) of the camera in addition to the user control. See Fig. 1 and Para. [0026].

As for **claim 11**, the limitations of claim 1 are again taught above, and the Sisselman reference discloses that the user control includes a normal picture taking control on the camera (real-time button 150), as is shown in Fig. 1 and Para. [0030].

In regard to **claim 12**, the limitations of claim 1 are set forth above, and Sisselman teaches that the camera apparatus further comprises a further mechanically operable user control (e.g. pause control button 185) for generating a corresponding related saliency signal (i.e. a pause command), as is shown in Fig. 1 and Paras. [0026-0034].

Considering **claim 13**, the limitations of claim 12 are taught above, and the Sisselman reference discloses that the apparatus comprises saliency circuitry (microprocessor 350) for combining the saliency signals to provide a complex saliency signal, as is taught in Fig. 1 and Paras. [0031-0034].

As for **claim 14**, the limitations of claim 1 are once again set forth above, and the Sisselman reference discloses that the apparatus comprises saliency circuitry (microprocessor 350) for generating an image related saliency signal in response to the image signal (from image/signal processor 320), as is taught in Fig. 1 and Paras. [0031-0034].

Considering **claim 15**, the limitations of claim 14 are taught above, and the Sisselman reference discloses that the apparatus comprises saliency circuitry (microprocessor 350) for combining the saliency signals to provide a complex saliency signal, as is taught in Fig. 1 and Paras. [0031-0034].

In regard to **claim 17**, the limitations of claim 1 are taught above, and Sisselman teaches that the user control (140) forms part of the body of the camera, as is illustrated in Fig. 1 and taught in Para. [0026].

Regarding **claim 19**, the limitations of claim 1 are again taught above, and Sisselman discloses that the user control (140) comprises a physically movable control member (e.g. pressure switch) and a sensor for movement of the control member, as is taught in Para. [0026].

As for **claim 20**, again the limitations of claim 1 are set forth above, and Sisselman teaches that the user control (140) comprises a force sensing transducer (pressure phototransistor), as taught in Para. [0026].

Next, considering **claim 21**, the Sisselman reference teaches a camera apparatus comprising an electronic camera (hand-held personal viewing device 100) for producing an image signal (via image/signal processor 320), a mechanically operable user control (e.g. control button 190) for receiving an input from a user and for generating a saliency signal (i.e. a replay command) that is continuously variable while the image signal is being produced, operation of at least a part of the camera apparatus being arranged to be controlled in response to the saliency signal. Note that RAM 370 is controlled to alter the storage sequence of image data in response to the saliency signal (i.e. a replay command) generated by the user. Please refer to Figs. 1, 5, and 8, Paras. [0026-0034].

In regard to **claim 23**, the limitations of claim 21 are taught above, and the Sisselman reference also teaches that the part includes image selection circuitry (microprocessor 350) for receiving the saliency signals (i.e. from control button 190) and image signals (from image/signal processor 320) and for selectively passing ones of the image signals as determined by the saliency signal. Please refer to Paras. [0033-0034].

As for **claim 24**, again the limitations of claim 21 are set forth above, and Sisselman further discloses that the part includes a buffer (circular buffer configuration of RAM 370) for receiving the image signal, the buffer having a length arranged to be controlled by the saliency signal in operation of the camera apparatus. Note that the user controls the length of the buffer based upon the number of times the replay button is pressed, as is taught in Col. [0034].

Considering **claim 28**, the limitations of claim 21 are taught above, and Sisselman teaches that the apparatus further includes a user operable picture taking control (switch 140) of the camera in addition to the user control. See Fig. 1 and Para. [0026].

Regarding **claim 29**, again the limitations of claim 21 are taught above, and the Sisselman reference discloses that the user control includes a normal picture taking control on the camera (real-time button 150), as is shown in Fig. 1 and Para. [0030].

Considering **claim 30**, the limitations of claim 21 are set forth above, and Sisselman teaches that the camera apparatus further comprises a further mechanically operable user control (e.g. pause control button 185) for generating a corresponding related saliency signal (i.e. a pause command), as is shown in Fig. 1 and Paras. [0026-0034].

As for **claim 31**, the limitations of claim 30 are taught above, and the Sisselman reference discloses that the apparatus comprises saliency circuitry (microprocessor 350) for combining the saliency signals to provide a complex saliency signal, as is taught in Fig. 1 and Paras. [0031-0034].

In regard to **claim 32**, the limitations of claim 21 are taught above, and the Sisselman reference discloses that the apparatus comprises saliency circuitry (microprocessor 350) for generating an image related saliency signal in response to the image signal (from image/signal processor 320), as is taught in Fig. 1 and Paras. [0031-0034].

Regarding **claim 33**, the limitations of claim 32 are taught above by Sisselman, and Sisselman further teaches that the apparatus comprises saliency circuitry (microprocessor 350) for combining the saliency signals to provide a complex saliency signal, as is taught in Fig. 1 and Paras. [0031-0034].g

Considering **claim 35**, the limitations of claim 21 are once again taught above, and Sisselman teaches that the user control (140) forms part of the body of the camera, as is illustrated in Fig. 1 and taught in Para. [0026].

As for **claim 37**, again the limitations of claim 21 are set forth above, and Sisselman discloses that the user control (140) comprises a physically movable control member (e.g. pressure switch) and a sensor arranged to be responsive to movement of the control member, as is taught in Para. [0026].

Regarding **claim 38**, again the limitations of claim 21 are set forth above, and Sisselman teaches that the user control (140) comprises a force sensing transducer (pressure phototransistor), as taught in Para. [0026].

In regard to **claim 39**, the limitations of claim 1 are taught above by Sisselman, and Sisselman also teaches that the saliency signal (from switch 140) is binary (i.e. the saliency signal is either sent (on) or not sent (off) to the microprocessor in relation to the user control), as is taught in Para. [0026].

Next, considering **claim 40**, the Sisselman reference teaches an imaging system comprising an electronic camera (hand-held personal viewing device 100) for producing an image signal (via image/signal processor 320), a plurality of mechanically operable user controls (e.g. control buttons 190 and 195), each of the user controls being arranged for receiving an input from a user and for generating saliency signals (i.e. a replay command and pause command) while the image signal is being produced,

Art Unit: 2622

and saliency circuitry (microprocessor 350) for combining the first and second saliency signals to form a complex saliency signal. Note that RAM 370 is controlled to alter the storage sequence of image data in response to the saliency signal (i.e. a replay command) generated by the user. Please refer to Figs. 1, 5, and 8, Paras. [0026-0034].

As for **claim 41**, the limitations of claim 40 are set forth above, and Sisselman teaches that the operation of at least part of the camera apparatus is arranged to be controlled in response to the complex saliency signal. Note that RAM 370 is controlled to alter the storage sequence of image data in response to the saliency signal (i.e. a replay command) generated by the user. Please refer to Figs. 1, 5, and 8, Paras. [0026-0034].

Considering **claim 42**, the limitations of claim 40 are taught above, and Sisselman teaches that the apparatus further includes a separate user operable picture taking control (switch 140) for permitting the camera to take pictures (in real-time mode). See Fig. 1 and Para. [0026].

In regard to **claim 43**, the limitations of claim 40 are taught above, and the Sisselman reference shows that the first of the saliency signals (i.e. the saliency signal pertaining to replay mode) has more than two values. Note that the signal alters the amount of replay time based on the times the replay button 190 is pressed, thereby providing a saliency signal with more than two values. Please refer to Para. [0034].

Next, considering **claim 44**, the Sisselman reference teaches an imaging system comprising an electronic camera (hand-held personal viewing device 100) for producing an image signal (via image/signal processor 320), a plurality of mechanically operable user controls (e.g. control buttons 190 and 195) for receiving an input from a user and for generating a first saliency signal (i.e. a replay command) while the image signal is being produced, and saliency circuitry (microprocessor 350) generating an image related second saliency signal (i.e. a pause command) in response to the image signal, and circuitry (again, microprocessor 350) for combining the saliency signals to form a complex

Art Unit: 2622

saliency signal. Note that RAM 370 is controlled to alter the storage sequence of image data in response to the saliency signal (i.e. a replay command) generated by the user. Please refer to Figs. 1, 5, and 8, Paras. [0026-0034].

As for **claim 45**, the limitations of claim 44 are set forth above, and Sisselman teaches that the operation of at least part of the camera apparatus is arranged to be controlled in response to the complex saliency signal. Note that RAM 370 is controlled to alter the storage sequence of image data in response to the saliency signal (i.e. a replay command) generated by the user. Please refer to Figs. 1, 5, and 8, Paras. [0026-0034].

Considering **claim 46**, the limitations of claim 44 are taught above, and Sisselman teaches that the apparatus further includes a separate user operable picture taking control (switch 140) for permitting the camera to take pictures (in real-time mode). See Fig. 1 and Para. [0026].

In regard to **claim 47**, the limitations of claim 44 are taught above, and the Sisselman reference shows that the first of the saliency signals (i.e. the saliency signal pertaining to replay mode) has more than two values. Note that the signal alters the amount of replay time based on the times the replay button 190 is pressed, thereby providing a saliency signal with more than two values. Please refer to Para. [0034].

Next, considering **claim 51**, the Sisselman reference teaches an apparatus comprising an electronic camera (hand-held personal viewing device 100) having a picture taking control (image/signal processor 32) for enabling the camera to supply picture signals, the camera further including user operable controls (e.g. control buttons 190 and 195) for generating a saliency signal, and a buffer (circular buffer memory configuration of RAM 370) for receiving the picture signals and having a capacity determined in response to the saliency signal. Note that the user controls the length of the buffer based upon the number of times the replay button is pressed, as is taught in Col. [0034]. Please also refer to Figs. 1, 5, and 8, Paras. [0026-0033].

In regard to **claim 52**, the limitations of claim 51 are taught above, and the Sisselman reference shows that the saliency signal (i.e. the saliency signal pertaining to replay mode) has more than two values. Note that the signal alters the amount of replay time based on the times the replay button 190 is pressed, thereby providing a saliency signal with more than two values. Please refer to Para. [0034].

Regarding **claim 53**, again the limitations of claim 51 are taught above, and Fig. 1 and Paras. [0032-0034] of the Sisselman reference teaches that the camera (100) includes the buffer (circular buffer memory configuration of RAM 370).

Next, in regard to **claim 54**, the Sisselman reference teaches an apparatus comprising an electronic camera (hand-held personal viewing device 100) having a picture taking control (image/signal processor 32) for enabling the camera to supply picture signals, the camera further including user operable controls (e.g. control buttons 190 and 195) for generating a saliency signal, and picture selection circuitry (microprocessor 350) for selectively passing the picture signals in response to the saliency signals (i.e. passing the picture signals not chosen when the user operates control button 190). Please refer again to Figs. 1, 5, and 8, Paras. [0026-0033].

As for **claim 55**, the limitations of claim 54 are taught above, and the Sisselman reference shows that the saliency signal (i.e. the saliency signal pertaining to replay mode) has more than two values. Note that the signal alters the amount of replay time based on the times the replay button 190 is pressed, thereby providing a saliency signal with more than two values. Please refer to Para. [0034].

Finally, considering **claim 56**, the limitations of claim 54 are set forth above, and Fig. 1 and Paras. [0032-0034] of the Sisselman reference teaches that the camera (100) includes the circuit (microprocessor 350).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sisselman (U.S. Pub. 2003/0007079).

In regard to **claims 18 and 36**, the limitations of independent claims 1 and 21 are respectively taught above by the Sisselman reference, but Sisselman only shows that the user control forms part of the body of the camera, as shown in Fig. 1, not that the user control is a remote control for communication with the camera. However, Official Notice is hereby taken that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the user control of Sisselman a remote control as opposed to a camera-body integrated control. One would have been motivated to do so because it is well known in the art that by using a remote control to control some elements of a camera, the user does not have to be near the camera to send and receive desired signals from the camera. This is particularly advantageous in cases where plural cameras are used or cameras are placed out of the reach of the user (e.g. surveillance cameras), where the remote control would allow the user to send signals to the camera(s) from a separate location, thereby simplifying camera control for the user. As the Applicant did not traverse the use of Official Notice in the previous office action, the above limitation is hereby considered to be admitted prior art.

Claims 2, 5-9, 16, 22, 25-27, 34, 48-50, and 57-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sisselman (U.S. Pub. 2003/0007079) in view of Fiore et al. (U.S. Pub. 2002/0191952).

First, in regard to **claim 2**, the limitations of claim 1 are taught by the Sisselman reference above, but Sisselman fails to teach that the camera apparatus includes compression circuitry for receiving the image signals and for compressing them to an extent determined by the saliency signal. However, noting the Fiore reference, Fiore teaches a camera apparatus (monitoring device 6 and signal processor 10) that includes compression circuitry (compressor 12) for receiving the image signals (from digitizer 11) and for compressing them to an extent determined by a saliency signal (an event signal sent from external event source 8 to event processor 16 of the signal processor 12). Please refer to Figs. 2-3, Paras. [0040-0041], [0044], and [0047-0051]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the compression circuitry of Fiore with the camera apparatus of Sisselman, as such compression circuitry would allow the user to choose a compression ratio of received image signals, wherein the user could disable the compression of image data when high resolution data is desired, yet enable the compression when the high resolution data is less important than sufficient storage space.

As for **claim 5**, the limitations of claim 1 are again taught above, and Fiore also teaches that the apparatus comprises a memory (file system 17) with management circuitry (event processor 16) for selectively retaining images (data frames from circular storage buffer 15) associated with higher saliency levels (i.e. event signals from event source 8) in the memory (17) in preference to images with lower saliency levels. Please refer to Figs. 2-3 and Paras. [0047-0048].

Considering **claim 6**, the limitations of claim 5 are set forth above, and Fiore also teaches that the memory (17) is arranged for storing the saliency signal (external event signal) together with the image signal (input signal data), as is again taught in Paras. [0047-0048].

As for **claim 7**, the limitations of claim 2 are again taught above, and Fiore also teaches that the apparatus comprises a memory (file system 17) including management circuitry (event processor 16) for selectively retaining images (data frames from circular storage buffer 15) associated with higher saliency levels (i.e. event signals from event source 8) in the memory (17) in preference to images with lower saliency levels. Please refer to Figs. 2-3 and Paras. [0047-0048].

Considering **claim 8**, the limitations of claim 7 are set forth above, and Fiore also teaches that the memory (17) is arranged for storing the saliency signal (external event signal) together with the image signal (input signal data), as is again taught in Paras. [0047-0048].

In regard to **claim 9**, the limitations of claim 1 are set forth above, and Fiore also teaches that the memory (17) is arranged for storing the saliency signal (external event signal) together with the image signal (input signal data), as is again taught in Paras. [0047-0048].

As for **claim 16**, again the limitations of claim 1 are set forth above, and the Fiore reference discloses circuitry (event processor 16) for incorporating the saliency signal (external event signal) in each of said image signals (input signal data), as is taught in Paras. [0047-0048].

Next, regarding **claim 22**, the limitations of claim 21 are taught above by the Sisselman reference, but Sisselman fails to teach that the camera apparatus includes compression circuitry for receiving the image signals and for compressing them to an extent determined by the saliency signal. However, noting the Fiore reference, Fiore teaches a camera apparatus (monitoring device 6 and signal processor 10) that includes compression circuitry (compressor 12) for receiving the image signals (from digitizer 11) and for compressing them to an extent determined by a saliency signal (an event signal sent from external event source 8 to event processor 16 of the signal processor 12). Please refer to Figs. 2-3, Paras. [0040-0041], [0044], and [0047-0051].

As for **claim 25**, the limitations of claim 21 are again taught above, and Fiore also teaches that the apparatus comprises a memory (file system 17) with management circuitry (event processor 16) for

Art Unit: 2622

selectively retaining images (data frames from circular storage buffer 15) associated with higher saliency levels (i.e. event signals from event source 8) in the memory (17) in preference to images with lower saliency levels. Please refer to Figs. 2-3 and Paras. [0047-0048].

Considering **claim 26**, the limitations of claim 25 are set forth above, and Fiore also teaches that the memory (17) is arranged for storing the saliency signal (external event signal) together with the image signal (input signal data), as is again taught in Paras. [0047-0048].

In regard to **claim 27**, the limitations of claim 21 are set forth above, and Fiore also teaches that the memory (17) is arranged for storing the saliency signal (external event signal) together with the image signal (input signal data), as is again taught in Paras. [0047-0048].

As for **claim 34**, again the limitations of claim 21 are set forth above, and the Fiore reference discloses that the apparatus further includes circuitry (event processor 16) for incorporating the saliency signal (event signal from event source 8) in each of the image signals (stored in file system 17), as is shown in Paras. [0047-0048].

Next, considering **claim 48**, the Sisselman reference teaches an apparatus comprising an electronic camera (hand-held personal viewing device 100) having a picture taking control (image/signal processor 32) for selectively activating the camera to derive picture signals, the camera further including user operable controls (e.g. control buttons 190 and 195) for generating a saliency signal. Please refer to Figs. 1, 5, and 8, and Paras. [0026-0033]. What Sisselman fails to teach that the camera apparatus includes compression circuitry for receiving the image signals and for compressing them to an extent determined by the saliency signal. However, noting the Fiore reference, Fiore teaches a camera apparatus (monitoring device 6 and signal processor 10) that includes compression circuitry (compressor 12) for receiving the image signals (from digitizer 11) and for compressing them to an extent determined by a saliency signal (an event signal sent from external event source 8 to event processor 16 of the signal processor 12). Please refer to Figs. 2-3, Paras. [0040-0041], [0044], and [0047-0051]. It would have

Art Unit: 2622

been obvious to one of ordinary skill in the art at the time the invention was made to have included the compression circuitry of Fiore with the camera apparatus of Sisselman, as such compression circuitry would allow the user to choose a compression ratio of received image signals, wherein the user could disable the compression of image data when high resolution data is desired, yet enable the compression when the high resolution data is less important than sufficient storage space.

Regarding **claim 49**, the limitations of claim 48 are taught above, and the Sisselman reference shows that the saliency signal (i.e. the saliency signal pertaining to replay mode) has more than two values. Note that the signal alters the amount of replay time based on the times the replay button 190 is pressed, thereby providing a saliency signal with more than two values. Please refer to Para. [0034] of Sisselman.

As for **claim 50**, again the limitations of claim 48 are taught above, and Fiore shows in Fig. 2 and Paras. [0043-0044] that the camera apparatus includes the circuit (compressor 12).

Next, in regard to **claim 57**, the Sisselman reference teaches an apparatus comprising an electronic camera (hand-held personal viewing device 100) having a picture taking control (image/signal processor 32) for enabling the camera to supply picture signals, the camera further including user operable controls (e.g. control buttons 190 and 195) for generating a saliency signal. Please refer to Figs. 1, 5, and 8, and Paras. [0026-0033]. What Sisselman fails to specifically teach is that the apparatus comprises a memory arranged for selectively retaining images associated with higher saliency levels in the memory in preference to images with lower saliency levels. However, noting the Fiore reference, Fiore teaches an apparatus that comprises a memory (file system 17) with management circuitry (event processor 16) for selectively retaining images (data frames from circular storage buffer 15) associated with higher saliency levels (i.e. event signals from event source 8) in the memory (17) in preference to images with lower saliency levels. Please refer to Figs. 2-3 and Paras. [0047-0048]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated the

Art Unit: 2622

memory of Fiore with the apparatus of Sisselman, as such a memory would allow the user to permanently store desired images (images stored due to the saliency signals) as opposed to merely reviewing the desired images without permanent storage, thus enabling the user to review and process images at any desirable moment.

Regarding **claim 58**, the limitations of claim 57 are taught above, and the Sisselman reference shows that the saliency signal (i.e. the saliency signal pertaining to replay mode) has more than two values. Note that the signal alters the amount of replay time based on the times the replay button 190 is pressed, thereby providing a saliency signal with more than two values. Please refer to Para. [0034] of Sisselman.

Finally, considering **claim 59**, again the limitations of claim 57 are set forth above, and the Fiore reference also discloses that the camera apparatus includes the memory (file system 17), as illustrated in Fig. 2 and Paras. [0043-0044].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

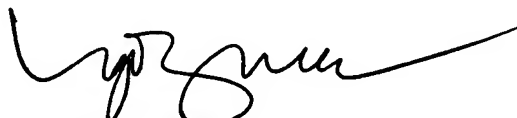
Art Unit: 2622

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory V. Madden whose telephone number is 571-272-8128. The examiner can normally be reached on Mon.-Fri. 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Yen Vu can be reached on 571-272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gregory Madden
September 4, 2007



NGOC-YEN VU
SUPERVISORY PATENT EXAMINER